

In the Claims

Applicant has submitted a new complete claim set in which insertions and deletions in marked-up claims are indicated by underlining and strikeouts, respectively.

1. (Previously presented) An isolated polypeptide comprising the amino acid sequence of SEQ ID NO:5, or a fragment thereof having at least 14 consecutive amino acids of SEQ ID NO:5.
2. (Currently amended) An isolated immunogenic polypeptide comprising the amino acid sequence of SEQ ID NO:12, or a functional amino acid substitution variant that retains immunogenicity thereof.
3. (Currently amended) The isolated immunogenic polypeptide of claim 2 wherein the isolated immunogenic polypeptide ~~peptide~~ consists of an amino acid sequence selected from the group consisting of SEQ ID NO:5, SEQ ID NO:9 and SEQ ID NO:12.
- 4-6. (Canceled)
7. (Original) A composition comprising the isolated immunogenic polypeptide of claim 2.
- 8-57. (Canceled)
58. (Currently amended) A ~~vaccine~~ composition comprising an immunogenic fragment of SEQ ID NO:5 and a pharmaceutically acceptable carrier.
59. (Currently amended) The ~~vaccine~~ composition of claim 58, wherein the immunogenic fragment comprises the amino acid sequence of SEQ ID NO:12.
- 60-64. (Canceled)
65. (New) The isolated immunogenic polypeptide of claim 1 wherein the isolated polypeptide consists of the amino acid sequence of SEQ ID NO:12.

66. (New) The isolated polypeptide of claim 1 wherein the isolated polypeptide is non-hydrolyzable.

67. (New) The isolated polypeptide of claim 2 wherein the isolated polypeptide is non-hydrolyzable.

68. (New) The isolated polypeptide of claim 66 wherein the isolated polypeptide is selected from the group consisting of peptides comprising D-amino acids, peptides comprising a $-\psi[\text{CH}_2\text{NH}]$ -reduced amide peptide bond, peptides comprising a $-\psi[\text{COCH}_2]$ -ketomethylene peptide bond, peptides comprising a $-\psi[\text{CH}(\text{CN})\text{NH}]$ -(cyanomethylene)amino peptide bond, peptides comprising a $-\psi[\text{CH}_2\text{CH}(\text{OH})]$ -hydroxyethylene peptide bond, peptides comprising a $-\psi[\text{CH}_2\text{O}]$ -peptide bond, and peptides comprising a $-\psi[\text{CH}_2\text{S}]$ -thiomethylene peptide bond.

69. (New) The isolated polypeptide of claim 67 wherein the isolated polypeptide is selected from the group consisting of peptides comprising D-amino acids, peptides comprising a $-\psi[\text{CH}_2\text{NH}]$ -reduced amide peptide bond, peptides comprising a $-\psi[\text{COCH}_2]$ -ketomethylene peptide bond, peptides comprising a $-\psi[\text{CH}(\text{CN})\text{NH}]$ -(cyanomethylene)amino peptide bond, peptides comprising a $-\psi[\text{CH}_2\text{CH}(\text{OH})]$ -hydroxyethylene peptide bond, peptides comprising a $-\psi[\text{CH}_2\text{O}]$ -peptide bond, and peptides comprising a $-\psi[\text{CH}_2\text{S}]$ -thiomethylene peptide bond.

70. (New) The composition of claim 7, wherein the isolated immunogenic polypeptide comprises the amino acid sequence of SEQ ID NO:12.

71. (New) The composition of claim 70, wherein the isolated immunogenic polypeptide consists of an amino acid sequence selected from the group consisting of SEQ ID NO:5, SEQ ID NO:9, and SEQ ID NO:12.